

**MODEL****RM**

## TILTING DISC CHECK VALVE

The **RM** model is a reliable metal seated check valve with oblique seating angle widely used in industries such as:

- Pulp and Paper
- Wastewater treatment Plants
- Food and Beverage
- etc.

### Main features:

- Suitable for all the standart flanges
- Short Face to Face
- Excellent tightness according to API 598
- Low pressure drop and opening pressure
- Quick closing reaction (oblique seating) which reduces water hammer
- As an option auxiliary spring increases the closing reaction



**Sizes:** DN 40 to DN 900 (larger diameters on request)

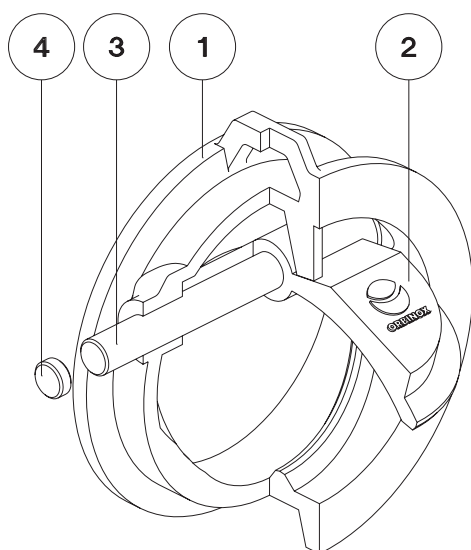
**Working pressure:** DN 40 to DN 300: 40 kg/cm<sup>2</sup>  
 DN 350 to DN 600: 25 kg/cm<sup>2</sup>  
 DN 700 to DN 900: 10 kg/cm<sup>2</sup>

**Standard flange connection:** EN1092 PN 10/16/25/40  
 ANSI B16.5 (class 150)

Other flange connections are available on request. Face to face dimensions are according to EN 558-1 (Serie 16). The RM check valve is according to PED 97/23/CE Directive Categorie I Module A Fluid Group 2(b). Under request are also available Categorie II/III.

DIR 94/9/CE (ATEX) Please contact Orbinox for information and availability of categories and zones.

All valves are tested prior to shipping in accordance with the standard developed by the Quality Control Department at ORBINOX.



### STANDARD PARTS LIST

| Part:    | Stainless steel: |
|----------|------------------|
| 1- Body  | CF8M             |
| 2- Disc  | CF8M             |
| 3- Shaft | AISI 316         |
| 4- Cover | AISI 316         |



Reserves the right to change specifications without notice

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OBX 09/09 8th EDITION

RM-1

**MODEL**

**RM**



## DESIGN FEATURES

### **BODY:**

Wafer style cast **monoblock**.

Cast-in lift eye starting from DN 200 for easier installation.

### **DISC:**

Cast circular, of lightweight designed for maximum strength and low inertia shape.

### **SHAFT:**

Stainless steel heavy stub shafts are positioned to give maximum strength and accurate guiding to the tilting disc.

One-piece design for diameters up to DN 200, two piece for diameters over DN 250.

Seal welded covers on the exterior of the valve body.



## OTHER OPTIONS

### **AUXILIARY SPRING**

Accelerates the speed of closing.

### **OTHER MATERIALS OF CONSTRUCTION**

Special alloys such as AISI 317, 254SMO, Hastelloys, Titanium...

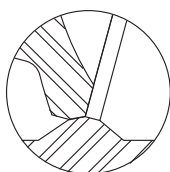
### **FABRICATED VALVES:**

**ORBINOX** is equipped for in house fabrication of special valves. Depending on the design, diameter, pressures, material of construction,...

### **COUNTERWEIGHT WITH OR WITHOUT HYDRAULIC DAMPER**

It is normally used in pumping stations to reduce the water hammer effect. Application of these systems requires previous study of the installation characteristics. In these cases contact technical department is recommended.

## SEAT TYPE



### **METAL / METAL** (standard)

The sealing is effected by precision machined seats in the body and the disc edge.

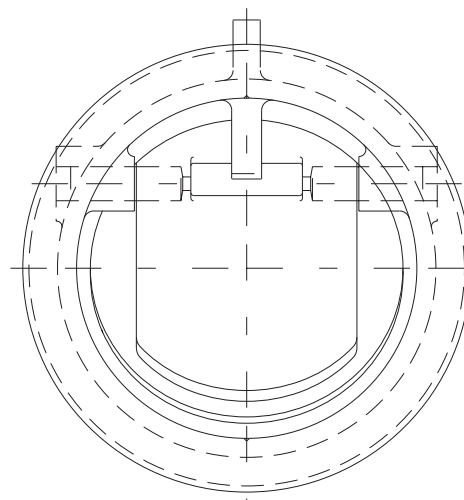
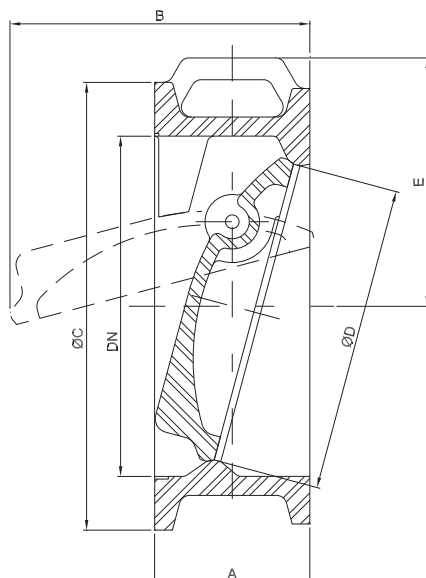
- The **RM** check valve consists of:

- Body
- Disc
- Shaft
- Covers

- Sizes: DN 40 to DN 900

- Options (on request):

- Auxiliary spring
- Counterweight, with or without dashpot.



| DN  | A   | B     | Ø (PN10/16/25/40-ANSI150) | ØD  | E     | Weight (kg.) |
|-----|-----|-------|---------------------------|-----|-------|--------------|
| 40  | 33  | 45    | 84                        | 34  | -     | 0,8          |
| 50  | 43  | 54    | 102,5                     | 44  | -     | 1            |
| 65  | 46  | 64    | 121,5                     | 58  | -     | 2            |
| 80  | 64  | 85    | 134,5                     | 72  | -     | 3            |
| 100 | 64  | 98    | 162                       | 90  | -     | 4,5          |
| 125 | 70  | 116,5 | 192                       | 112 | -     | 6,5          |
| 150 | 76  | 136   | 219                       | 135 | -     | 7,5          |
| 200 | 89  | 222,5 | 273                       | 180 | 155   | 15           |
| 250 | 114 | 221   | 329                       | 225 | 182,5 | 26,5         |
| 300 | 114 | 251   | 378                       | 270 | 210   | 33,5         |
| 350 | 127 | 294   | 438                       | 315 | 240   | 54           |
| 400 | 140 | 340   | 489                       | 365 | 275   | 65,5         |
| 450 | 152 | 370   | 540                       | 410 | 300   | 92           |
| 500 | 152 | 405   | 594                       | 460 | 325   | 110          |
| 600 | 178 | 497   | 696                       | 555 | 390   | 178          |
| 700 | 229 | 616   | 800                       | 650 | 460   | 245          |
| 750 | 229 | 613   | 880                       | 650 | 485   | 310          |
| 800 | 241 | 675   | 917                       | 745 | 515   | 385          |
| 900 | 241 | 750   | 1012                      | 835 | 562   | 445          |